AMSAT News Service Weekly Bulletins
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SB SAT @ AMSAT $ANS-254.01
SPACE SYMPOSIUM AGENDA

HR AMSAT NEWS SERVICE BULLETIN 254.01 FROM AMSAT HQ
SILVER SPRING, MD SEPTEMBER 11, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-254.01

W5IU Provides Agenda For AMSAT-NA Space Symposium 7-10 OCT

PRELIMINARY AGENDA
1993 AMSAT-NA ANNUAL MEETING
AND SPACE SYMPOSIUM

October 7, 8, 9, & 10, 1993
La Quinta Inn - Arlington, Texas

Thursday, October 7th

All Day - Leave La Quinta Inn at 09:00
Electronic Surplus Tour of the Fort Worth/Dallas Metroplex
- Transportation & Tour Guide Provided

Friday, October 8th, Morning -

Registration Opens -
Antenna Test Range Adjacent To Hotel - WA5VJB, Kent Britain

Friday, October 8th, Afternoon -

ARRL/AMSAT Educational Workshop - WA1STO, Rosalie White
(Runs Concurrent with technical papers)

Technical Papers:

"Status of SEDSAT-1" - KD4ETA, Dennis Wingo
"UNAMSAT-1 Experimental Module - TSFR" - XE1TU, David Liberman
"IT-AMSAT-1 Status" - I2KBD, Alberto Zagni
"High-Resolution Weather Satellites" - N5ITU, Jeff Wallach
"Hubble Space Telescope Service Mission Preview" - N8FGV, Dan Schultz

Friday, October 8th, Evening - on your own for dinner and entertainment.
Local assistance provided.

Saturday, October 9th, Morning -

"Welcome To The 1993 Space Symposium and AMSAT-NA Annual Meeting"
W3XO, Bill Tynan - AMSAT-NA President

"The AMSAT Phase 3D Spacecraft"
WD4FAB, Dick Jansson - AMSAT-NA VP of Engineering

"The AMSAT Phase 3D Electronics"
DB2OS, Peter Guelzow - AMSAT-DL

"AMSAT Phase 3D Antenna Design Review" - WA4NFY, Stan Wood

"How GPS Receivers Work"
"AMSAT Phase 3D GPS and Master Oscillator Package"
    W3IWI, Tom Clark - AMSAT-NA President Emeritus

"The Shuttle Amateur Radio Experiment - Current Status and Future Visions"
    KA3HDO, Frank Bauer - AMSAT-NA VP, Manned Space
"SAREX Shuttle Mission Operations - From A Payload's Point Of View"
    W5DID, Lou McFadin

Saturday, October 9th, Afternoon -

"Managing OSCAR-13"
    G3RUH, James Miller

"Development Of A Portable Mode S Ground Station"
    KA9LNV, Ed Krome

"DOVE Progress Report and Future Operation" - WD0E, Jim White

"Some 20-20 Hindsight: A Slightly Different View Of WEBERSAT"
    KB7KCL, Bob Argyle

"DSP-93: The Joint DSP Program (TAPR/AMSAT)"
    N5BRG, Bob Stricklin

"Digital Processing Of Weak Signals Buried In Noise"
    AA7FV, Darrel Emerson

"AMSAT-NA Operations Report - 1993"
    W5IU, Keith Pugh - AMSAT-NA VP of Operations

Meet Your AMSAT-NA Board of Directors

Saturday, October 9th, Evening -

Happy Hour

Dinner Banquet, Program, Recognition Awards and
               Prize Drawings

Sunday, October 10th, Morning -

Field Operations Breakfast

AMSAT-NA Board of Directors Meeting
(Open Meeting, Run Concurrent with Technical Papers)

Technical Papers -

"VOXSAT - VOice eXperiment SATellite"
    LW2DTZ, Gustavo Carpignano - AMSAT-LU VP

"Tools For The Digital Satellites - Part 1, The Downlink"
    WA4SXM, Gould Smith

"Implementing The PACSAT Broadcast Protocol On
 Terrestrial Networks" - WA0PTV, John Hansen

"Non-Messaging Uses Of The Store-and-Forward Satellites -
 The Integrated Power Corporation Nusa Penida Project"
    WD3Q, Eric Rosenberg

"S Band For The Beginner" - KA9LNV, Ed Krome

"Using Metal Booms To Support AMSAT Antennas"
WA5VJB, Kent Britain

"Microsat Ground Stations" - WB1HBU, Eric Cottrell

"Birth Of A Satellite Education Program In Sweden"
SM2UHI, Borje Rautio
"Experimental Determination Of Properties Of The
RS-10 Mode A Transponder" - KE3HP, Walter Daniel

Sunday, October 10th, Noon - End of Symposium - Board Meeting Continues

[The AMSAT News Service (ANS) would like to thank Keith Pugh (W5IU) for this bulletin item. There is still time to register for the AMSAT-NA Symposium. For more information about the Symposium, contact AMSAT-NA Headquarters at (301) 589-6062.]

/EX
SB SAT @ AMSAT $ANS-254.02
AO-13 ZRO TESTS RETURN!

HR AMSAT NEWS SERVICE BULLETIN 254.02 FROM AMSAT HQ
SILVER SPRING, MD SEPTEMBER 11, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-254.02

ZRO Tests Return To AO-13

The ZRO Memorial Technical Achievement Award Program, or just "ZRO Test" has a new schedule for September and October '93 via AMSAT-OSCAR-13. This activity is a test of operating skill and equipment performance. Due to scheduling difficulties only three tests have been set up for this round so be sure to mark the test dates and times on your calendar.

During a typical ZRO run, a control station will send numeric code groups using CW at 10 words-per-minute. At the beginning of the run, uplink power from the control station is set to match the general beacon downlink strength. This is level "zero." The control operator will send and repeat a random five-digit number, then lower his uplink power by 3 dB (half power) and repeat the procedure with a new random number. This will continue to a level 30 dB below the beacon (level "A").

A participating listener monitors the downlink signals until he can no longer copy the numbers. Those who can hear the beacon will qualify for the basic award by copying the code group heard at level "zero". The challenge is to improve home-station performance to a point where the lower-level downlink signals can be copied (levels 6 through 9).

The following schedule of Mode "B" tests were chosen for convenient operating times and favorable squint angles. The tests can be heard on 145.840 MHz. Andy (WA5ZIB) will conduct all the tests. Mode "JL" tests will no longer occur due to the failure of AO-13's 70-cm transmitter. Ed (N5EM) will be back next year after he completes station calibrations necessary to insure accurate Mode "B" activity. His "JL" tests were greatly appreciated.

Sunday Sep. 26, 1993 at 0545 UTC
Saturday Oct. 2, 1993 at 1335 UTC
Monday Oct. 18, 1993 at 0430 UTC

Note that the dates and days are shown in "UTC", thus the first and third tests shown occur in the late evening hours for those in North America.

For example, the October 18th UTC test is at 11:30 PM CDT Sunday night (the 17th). Any changes will be announced as soon as possible via the AMSAT HF and AO-13 Operations Nets.

ZRO brochures are available from WA5ZIB, Andy MacAllister, AMSAT VP of User Operations, 14714 Knightsway Drive, Houston, TX 77083 for an S.A.S.E. with two units of postage. The brochure characterizes test procedures, means for obtaining certificates and gives some historical background about the prog-ram. New brochures were not made for the current round of tests, but this announcement and a graphical presentation of the satellite's view during the tests will be provided along with the March 1993 version of the brochure.

All listener reports with date of test and numbers copied should be sent to WA5ZIB at the address above. A report will be returned verifying the level of accurate reception.

/EX
SB SAT @ AMSAT $ANS-254.03
AMSAT OPS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 254.03 FROM AMSAT HQ
SILVER SPRING, MD SEPTEMBER 11, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-254.03

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date	UTC	Mode	Phs	NCS	Alt NCS
18-Sep-93	1515	B	96	N7NQM	W5IU
2-Oct-93	1400	B	160	WA5ZIB	WJ9F
9-Oct-93	1500	B	101	W9ODI	N7NQM

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. In the unlikely event that either the Net Control Station (NCS) or the alternate do not call on frequency, any participant is invited to act as the NCS.

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Slow Scan Television on AO-13

SSTV sessions will be held on immediately after the OPS Nets a downlink on a Mode-B downlink frequency 145.960 MHz.

/EX
SB SAT @ AMSAT $ANS-254.04
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 254.04 FROM AMSAT HQ
SILVER SPRING, MD SEPTEMBER 11, 1993
TO ALL RADIO AMATEURS BT
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Weekly OSCAR Status Reports: 11-SEP-93

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Aug 16-Oct 25
Mode-B : MA 0 to MA 60 !
Mode-BS : MA 60 to MA 120 !<- after Aug 30 (hopefully)
Mode-S : MA 120 to MA 145 !<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 !<- S beacon only
Mode-BS : MA 150 to MA 180 ! Alon/Alat 180/0
Mode-B : MA 180 to MA 256 !
Omnis : MA 230 to MA 40 ! Move to attitude 210/0, 25-Oct-93
Continuous up-to-date information about AO-13 operations is always available on the beacons at 145.812 MHz and 2400.646 MHz in CW, RTTY and 400 bps PSK. Also, these bulletins are also posted to INTERNET, ANS bulletins, Packet, PACSATs, etc., and can also be found in many international newsletters. [G3RUH/DB2OS/VK5AGR]

AO-16: Operating normally. SATGATE operations have moved from LO-19 (LUSAT) to AO-16 (PACSAT). As KI6QE indicated when the move was made, the number of files involved is quite small, so it is still possible to keep track of everything on this satellite even with checking a few times a week. [WH6I]

UO-22: Operating normally. There were a few good images last week. [WH6I]

KO-23: Operating normally. [WH6I]

FO-20: N0NBH reports that FO-20 continues to operate normally after last week's on-board computer resets. [N0NBH]

UNAMSAT-1: The Mexican MICROSAT is scheduled for launch late this year on a refurbished Soviet ICBM designed to carry satellites. So far Program Manager XE1TU does not have all the final keplerian elements of the intended orbit. However, the known parameters are as follows:

Orbital Inclination = 73 degrees
Altitude = 730 KM
Orbital Eccentricity = 0.00000000

The satellite will separate from the rocket with no spin. All transmitters will be silent at separation and for a period of at least 1 hour. The VHF receive antenna and the two halves of the canted dipole for 40.997 MHz will be collapsed and then they will be deployed 3 minutes after separation. [XE1TU]

RS-10: HB9RHV is quite active on RS-10 and looks forward to contacts and schedules for those who would like to make a DX contact. [HB9RHV]

UO-11: Controllers at the UoSAT Control Centre at the University of Surrey are requesting the help of the amateur radio community around the world in collecting information and data from UOSAT-OSCAR-11. The Forth Diary Operating system aboard UO-11 has crashed within the past 24 hours. This has rendered the spacecraft in a non-nominal operating state. The collection of information and data related to the operational condition of the spacecraft over the next several days will be essential in helping the controllers to understand the spacecraft's current condition. Therefore the UoSAT command team is asking radio amateurs around the world to monitor the spacecraft and relay any reception reports and or telemetry data collected from the spacecraft to them via G0SYX @ UO-22, G0SYX @ KO-23 or via the INTERNET address: D.Loughmiller@ee.surrey.ac.uk UOSAT-OSCAR-11 operates on a 2M frequency of 145.825 MHz and on a 70 cm frequency of 435.027 Mhz. Controllers are most interested in which beacon is active at the time of any given observation and whether the signal contains data or not. Any telemetry data collected would be of particular interest to the controllers as well. Any observations provided by the amateur community will be most appreciated. UoSAT controllers will issue subsequent bulletins about the status of the UoSAT-OSCAR-11 spacecraft as the situation develops. [KO5I/G0SYX]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly

OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

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